SI N	Name of the firm	Date of Payment	Amount	Remarks
3.	M/s. Capital Power Systems	05.10.2000	Rs. 1,50,00,000/-	REC
4.	M/s. Elymer Electrics	13.10.1998	Rs. 20,00,000/-	State
5.	M/s. Elymer Electrics	13.04.1999	Rs. 1,00,00,000/-	State

Total: Rs.3,03,00,000/-

(Rupees three crores and three lakhs only).

Targets and Achievements in Non-Conventional Energy sources

*173. SHRI MANOJ BHATTACHARYA: Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

(a) the targets and achievements in respect of Non-Conventional Energy Sources other than bio-gas;

(b) the State-wise dispersion in so far as promotion and utilisation of solar energy, wind mill etc;

(c) whether Government consider that small and Non-Conventional Sources of Energy will be more prudent in the days to come; and

(d) if so, what are the programmes that Government are contemplating?

THE MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI M. KANNAPPAN): (a) The physical targets and achievements made during 2000-01, in respect of various programmes of non-conventional energy sources other than biogas are given at Statement I (Seebelow)

(b) The State-wise potential of major non-conventional energy sources such as biogas, improved chulhas, wind power, biomass and small hydro power has been estimated and are given at Statement II *(See* below). The State-wise potential have not been estimated for other non-conventional energy sources. The State-wise cumulative physical achievements made under various non-conventional energy programmes as on 31st December, 2000 are given at Statement III (Seebelow).

(c) and (d) The Ministry is promoting and popularizing the use of decentralized and stand alone system/device for meeting various energy needs through wide ranging programmes of non-conventional energy sources such as solar, wind, bidmass, small hydro power and urban and industrial wastes.

Statement-I

Annua! Physical Targets and Achievements made during the year 2000-01

Programmes/Schemes	Units	Annual Target	Achievements (April-Dec, 2000)
Improved chulha	Nos. in i	20	6.73
B i omass/Gas i fier	MW	7	1.15
Solar Photovoltaic (SPV) Programme			
SPV Home Light	Nos.	50,000	20437
SPV Lanterns	Nos.	70,000	40978
SPV Street Lighting	Nos.	3000	1848
SPV Power Plants	kWp	275	114.3
SPV Pumps	Nos.	700	252
Solar Thermal Energy			
Solar water Heating Systems	m2 collector area	35,000	10917
Solar Cooker	Nos.	35,000	10000
Wind Pumps	Nos.	200	33
Small Aerogenerators & Hybrid Systems	kW	60	1.5
Wind Power	MW	200	70
Small Hydro Power	MW	40	72.3
Biomass Power	MW	60	50.8
Solar Photovoltaic Power	kW	300	200
Urban & Industrial Waste to Energy	MW	10	1
Battery Operated Vehicle	Nos	20	14

kWp/kilo watt peak; m2 = meter square; kW= kilo watt; MW= Mega watt.

Statement-II

State-wise potential estimates for major renewable energy resources

Slates/U	Family Type Biogas Plants (Nos. in lakh)	Improved Chulhas lakh)	Smalt Hydro Power (upto 25 MW) (MW)	Bagasse Based Cogene-ration (MW)	Wind Power (MW)
1	2	3	4	5	6
Andhra Pradesh	10.66	97.08	255	200	8275
Arunach Pradesh al	0.08	1.5	1059		

I	2	3	4	5	6
Assam	3.08	36	1 18		
Bihar	9.40	123.83	368	200	
Goa	0.08	1.17	3		
Gujarat	5.54	50.72	157	200	9675
Haryana	3.00	2061	30		
Himachal Pradesh	1.26	8.53	1625		
Jammu & Kashmir	1.29	11.75	1207		
Karnataka	6 80	60.76	653	300	6620
Kerala	1.51	40.73	467		875
Madhya Pradesh	14.91	101.58	410		5500
Maharashtra	8.97	96.5	599	1000	3650
Manipur	0.39	2.64	106		
Meghalaya	0.24	2.54	182		
Mizoram	0.02	0.73	190		
Nagaland	0.07	2.01	181		
Orissa	6.06	54.55	157		1700
Punjab	4.12	25.38	65	150	
Rajasthan	9.15	55.54	27		5400
Sikkim	0.07	0.73	203		
Tamil Nadu	6.16	80.16	339	350	3050
Tripura	0.29	4.65	10		
Uttar Pradesh	20.21	187.45	1473	1000	
West Bengal	6.95	98.72	183		450
Andaman & Nicobar	0.02	0.4	6		
Chandigarh	0.14	0.66			
Dadar & Nagar	0.02	0.25			
Daman & Diu	—	0 1			
Delhi	0.13	9.06			
Lakshwadeep	—	0.1			
Pondicherry	004	0.59			

MW=Mega Watt.

Statement-III

Statewise Installation made under major non-conventional energy programmes as on 31.12.2000.

SI. No.	STATES/UT	BIO GAS PLANTS (Nos.)	IMP-ROVED CHULHA (Nos. inlaib)	SHP (MW) *	WIND POWER (MW)	BIO-MASS POWER (MW)	SOLAR PHOTOVOLTAIC SLS (Nos.)	HLS (Nos.)	SL (Nos!	WATER PUMPING PP (kWp)	W.ml MU[~	SPV Pumps (Nos.)	SOLAR Cooker (Nos.)	BIO-Gasificrs (kW)	U&l (MW
I	Andhra Pradesh	301595	35.5	128.2	89.6	IL7~	1217	5[*5R	'15214	' 20 5	2	5 73	118"51	'146H4	7.7
2	Arunachal Pradesh	967	0.3	33.1	0 0	0	738	650	4437	7.9	0	0	530	180	0
3	Assam	47194	5.3	2.0	0 0	0	9X	1937	541	3.0	3	45	80	23	0
4	Bihar	! 18396	1: 4	49 0	0.0	0	673	556	42149	0 0	42	127	730	2 0	0
S	Goa	3256	1.2	0.1	0.0	0	40	51	245	1.7	0	15	1417	22	0
6	Gujarat	336746	13.6	7.0	166.9	0.5	1614	870	15729	14.0	24 5	23	51079	3921	2
7	Haryana	41075	9.9	48.2	0.0	4	1125	3946	24260	24.2	0	55	18022	964	0
8	Himachal Pradesh	42919	6.6	87.3	0.0	0	944	7893	18050	0.0	0	6	26136	7	0
9	Jammu & Kashmir	1932	4.1	85.1	0 0	0	389	11357	5225	40.0	0	16	345	120	
10	Karnataka	295337	14.7	138.4	37.9	61 6	639	768	3542	3 0	20	2 96	250	3 69 9	1
1 1	Kerala	68870	8.7	69.5	2.0	0	710	2798	34040	4.7	6 7	644	194	615	
1 2	Madhya Pradesh	182640	29.0	39.2	22.6	5	5 5 87	184	7851	22.4	0	66	181000	4429	2.7
1 3	Maharashtra	654712	23.1	195.3	156.8	9	3 199	368	6411	6.4	18	146	52017	3 323	1
14	Manipur	1939	0.7	4.7	0.0	0	3 70	50	3400	1 10	0	12	365	0	0
1 5	Meghalaya	1404	0 2	30 7	0.0	0	593	320	3200	38.0	0	5	1 164	0	0
1 6	Mizoram	2336	0.5	11.8	0 0	0	3 15	1645	3562	0.0	0	32	1 18	II	0
1 7	Nagaland	1117	0.3	3.9	0 0	0	271	143	95	60	0	0	0	0	0
18	Orissa	166425	18 6	13	1 1	0	5618	1446	5806	36.5	0	3	30:0	72	0
19	Punjab	60821	1 1.3	100.9	0 0	12	1466	2220	11245	46.0	0	233	21 179	660	0.75
20	Rajasthan	65596	25.5	23.9	4 3	0	7152	17872	4716	25.8	222	229	3 6116	218	0
2 1	Sikkim	2744	0.7	30 5	00	0	127	160	320	00	0	0	20	0	0
2 2	Tamil Nadu	199893	26.4	73.9	787 7	94	2121	21	7614	26.0	4 9	692	1355	"53	0.06
2 3	Tripura	1359	0.6	16.0	0 0	0	400	1578	9605	24.6	0	0	68	0	0
24	Utlar Pradesh	349861	37.1	73.4	0 0	50 5	708	67329	64860	178 9	0	202	41242	511	1
2 5	West Bengal	178332	31.3	87.9	00	0	i 290	11353	3421	298 8	0	46	5575	530	0
2 6	Andaman & Nicobar	137	0.3	0.0	00	0	346	391	538	149.1	2	5	59	167	0
2 7	Chandigarh	97	0.2	0 0	0 0	0	0	150	1075	0.0	0	9	1523	0	0
2 8	Dadar & Nagar Haveli	16')	8.1	0 0	00	0	(i	0	0	0 0	0	1	8 1	0	
2 9	Daman & Diu	0	0.0	0.0	0 0	0	0	0	0	00	0	0		0	0
30	Delhi	*74	2.7	0 0	00	0	30 1	0	5692	5.0	0	77	27990	74	0
3 1	Lakshwadeep	0	0.1	0.0	00	0	71 1	0	5060	S5-0	0	0	0	0	0
3 2	Pondichery	539	0.4	0.0	0.0	0	2	0	556	0.0	0	1 7	88	0	0
33	Others		6.1	0.0	0.5	0	0	6	9851	0.0	0	0	7600	318	0
	TOTAL :	3129082	326.4	1341.1	1269 4	272.8	40764	137212	319310	1078.7	670	3575	491212	35510	16.2

SPV-Solar photovoltaic, SHP-Small Hydro Power SLS-Street Lighting System. HLS-Home Lighting System SL-Solar Lanterns U&l-Urban & Indusrial Waste Energy PP-Power Plants MW-Mega Watt: kWp-Kilowatt peak.